

VITA

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Education

- Ph.D. in Development Sociology, Cornell University, Ithaca, New York, 1995
 - Minors: Agronomy and Entomology
- M.S. in Food and Resource Economics, University of Florida, Gainesville, 1988.
- B.A. in Economics, The College of William and Mary, Williamsburg, Virginia, 1983.

Professional Appointments

Current Positions:

- Senior Research Associate in the Center for Policy Research and Professor of Sociology in the Maxwell School of Citizenship and Public Affairs, Syracuse University (7/2024-Present).

Previous Positions:

- Falk Family Endowed Professor of Food Studies, Department of Nutrition & Food Studies, Syracuse University (7/2016-7/2024).
- Professor of Food Studies, Department of Nutrition & Food Studies, Syracuse University (7/2012-7/2024).
- Chair of the Department of Nutrition and Food Studies, Syracuse University (7/14- 12/21).
- Taiwan Fellow, National Taiwan University, Taipei, Taiwan (1/2018-5/2018).
- Professor of Sociology, Clarkson University, Potsdam, New York (5/09 to 6/12).
- Associate Professor of Sociology, Clarkson University, Potsdam, New York (5/04 to 5/09).
- Visiting Scholar in the Resource, Environment and Science Policy Branch of the Economic Research Service/U.S. Department of Agriculture (1/07 to 6/07).
- Assistant Professor of Sociology, Clarkson University, Potsdam, New York (7/00 to 5/04).
- Interim Director, Henry A. Wallace Institute for Alternative Agriculture, Greenbelt, Maryland (7/98 to 1/00).

- Director of the U.S. Department of Agriculture's Southern Region Sustainable Agriculture Research and Program; and Adjunct Professor, Department of Agricultural and Applied Economics, University of Georgia, Griffin Station (1/97 to 6/98).
- Policy Analyst, Henry A. Wallace Institute for Alternative Agriculture, Greenbelt, Maryland (6/95 to 12/96).
- Budget Analyst, U.S. Department of Agriculture/ Foreign Agricultural Service (1/89 to 1/91).
- U.S. Peace Corps/Philippines Volunteer (5/83 to 7/85).

Professional Affiliations

- Agriculture, Food and Human Values Society
- American Association of Geographers
- American Sociological Association (Sections on Environmental Sociology, Development Sociology and Science, Knowledge and Technology)
- Rural Sociological Society (Sociology of Agriculture Interest Group)

Professional Activities

- Associate Editor (1/2024 to Present) *Renewable Agriculture and Food Systems* (formerly *American Journal of Alternative Agriculture*).
- Editor-in-chief (7/2011 to 12/2023) *Renewable Agriculture and Food Systems*.
- Member of the U.S. Department of Agriculture/NIFA Sustainable Agriculture Systems Review Panel (8/2023).
- Member of U.S. Environmental Protection Agency Scientific Advisory Panel on: "Resistance of Lepidopteran Pests to *Bacillus thuringiensis* (Bt) Plant Incorporated Protectants in the United States." Rosslyn, VA from July 17-20, 2018.
- Co-Chair of the Sociology of Agriculture and Food Research Interest Group of Rural Sociological Society (2013-2015).
- Member of the Development Committee of the Rural Sociological Society (2012-2014).
- Publication Advisor for *Agriculture and Human Values*
- Associate Editor (4/2003 to 7/2011) *Renewable Agriculture and Food Systems*
- Associate Editor (8/2005 to 6/2011) *Journal of Sustainable Agriculture*
- Panel Manager for U.S. Department of Agriculture's National Institute of Food and Agriculture Programs on Rural Development and Entrepreneurship (2011).
- Panel Member for U.S. Department of Agriculture's National Institute of Food and Agriculture Programs on Regional Approaches to Climate Change and Agricultural Prosperity for Small and Moderate-sized Farms and Rural Development (2010).
- External reviewer for National Science Foundation Program on Science, Technology and Society (2008)
- Technical committee member for the Sustainable Community Grant Program of the Northeast Sustainable Agriculture Research and Education Program (2009).
- External reviewer for Social Science Research Council of Canada (2008-2010).

- Book Review Editor (3/1999 to 12/2007), *Renewable Agriculture and Food Systems (formerly American Journal of Alternative Agriculture)*
- Panel member for the U.S. Department of Agriculture's National Research Initiative Agricultural Prosperity for Small to Moderate Sized Farms (2005 and 2006).
- Reviewer for Producer Grants Program of Northeast Sustainable Agriculture Research and Education Program (2005 to 2006)
- Council member of the Agriculture, Food and Human Values Society (6/2002 to 8/2005)
- Co-Chair of the Rural Sociological Society's Sociology of Agriculture Interest Group (1999)
- Associate Editor, *Rural Sociology* (1995 to 1999)

I have also reviewed manuscripts for several refereed journals including *Agriculture, Ecosystems, and the Environment*; *Agriculture and Environmental Ethics*; *Conservation Biology*; *Ecological Economics*; *Journal of Agricultural and Environmental Ethics*; *Journal of Soil and Water Conservation*; *Proceedings of the National Academy of Sciences*; *Research Policy*; *Rural Sociology*; *Science Advances*; *Signs*; *Social Forces*; *Social Studies of Science*; and *The Sociological Quarterly*.

Courses Taught

Agroecology	Biofuel and Farm Policy
Contemporary Food Issues	Environmental Policy
Environmental Sociology	Farm to Fork
Feeding the World	Food and Public Policy
Food Cooperatives	Globalization
International Development	Introduction to Food Systems & Studies
Introduction to Sociology	Research Methods (Food Studies, Social Science, and Nutrition)
Transnational Food, Health, and the Environment	The Clarkson Seminar (Great Books Course)

Awards and Honors

- Received the Excellence in Research Award from the Agriculture Food and Human Values Society (2016)
- Co-recipient of the 2016 Best Paper Award from the Rural Sociological Society for "Intellectual Property, Scientific Independence, and the Efficacy and Environmental Impacts of Genetically Engineered Crops." *Rural Sociology* 80: 147-172.
- Received the Fred Buttel Award for Outstanding Scholarly Achievement from the Rural Sociological Society (2013).
- Presented the Outstanding Teacher Award by the Clarkson University Student Association for 2003-2004.

Research Grants/Subcontracts

Anaerobic Digestion at Small and Moderate-Sized Farms: Linking food waste and farm waste treatment for economic energy and nutrient recovery. National Institute of Food and Agriculture/Agriculture and Food Research Initiative/Small and Medium-Sized Farm Program. 7/1/22-6/30/26. \$119,980 subaward from \$650,000 total award.

Primary Nesting Season Policy. Farms Services Administration/U.S. Department of Agriculture. 9/23/22-9/30/24. \$244,210.

Coast to Cow to Consumer: Marine algae use to enhance milk production, mitigate greenhouse gas emissions, and recover nutrients. Sustainable Agriculture Systems/National Institute of Food and Agriculture/USDA. 1/1/2021-12/31/2026. R. Welsh CO-PI with 8 other investigators. \$375,798 subaward from \$10 million total award.

Feeding seaweed to advance the sustainability of organic dairy and aquaculture systems. Organic Agriculture Research and Extension Initiative/ National Institute of Food and Agriculture/USDA. 7/1/2021-6/30/2026. R. Welsh CO-PI with six others. \$211,000 subaward from \$2,900,000 total award.

Further evidence for the negative consequences of mosquito net fishing in Barotseland, Zambia. Collaboration for Unprecedented Success and Excellence (CUSE) Grant Program (Syracuse Internal Grant Program). R. Welsh and D. Larsen. \$30,000. 5/1/2018-5/1/2020.

Evaluating the Role of Sustainable Farming Practices in Promoting Food Security While Protecting Endangered Species in the Galapagos Archipelago. Collaboration for Unprecedented Success and Excellence (CUSE) Grant Program (Syracuse Internal Grant Program). M. Voss and R. Welsh. \$5,000. 5/1/2018-5/1/2020.

Intellectual Property, Biotechnology, and Innovation. Taiwan Fellowship Program. R. Welsh, PI. \$7,500. 2/1/18-5/1/18.

Resource Recovery at Small Farms using Anaerobic Digestion: A Viable Technology Education and Outreach Effort. Department of Agriculture's National Institute of Food and Agriculture. S. Grimberg, S. Rogers, R. Welsh and P. Ames. \$500,000 4/17/17-4/17/20.

Are Insecticide-Treated Nets Misused as Fishing Nets in Zambia and Leading to Fishery Decline? Syracuse University Internal Grants Program. R. Welsh PI \$11,200. 11/30/15-11/29/16.

Assessing Intermediated Marketing Channels for Beginning Farmers and Ranchers to Enhance Farm Viability. U.S. Department of Agriculture's National Institute of Food and Agriculture. R. Welsh and C. Dimitri, Co-PIs. \$478,000. 1/1/16-12/31/18.

Anaerobic Digesters for Small-Farms: An economically viable technology outreach effort. U.S. Department of Agriculture's National Institute of Food and Agriculture. Awarded in collaboration with Clarkson University. S. Grimberg, S. Rogers and R. Welsh co-PIs. \$499,124. 4/1/14 – 5/1/15.

Environmental and Socioeconomic Factors Associated with Public-Private Partnership Wetland Restoration Projects Benefiting Wildlife in the Great Lakes Watershed. University of Michigan Water Center. Awarded in collaboration with Clarkson University. 9/2013 – 9/2014. T. Langen, D. Chandler and R. Welsh co-PIs. \$390,100.

Transdisciplinary Research: Defining the Research Problem. U.S. Department of Agriculture's Economic Research Service in collaboration with S. Thornsby at Michigan State University. 2010-2012. \$35,000.

Farm Waste to Energy: A Sustainable Solution for Small Dairy Farms. U.S. Environmental Protection Agency's P3 Program (People, Prosperity and Planet)- Phase 2. 7-2010 to 7-2011. S. Grimberg, S. Rogers and R. Welsh co-PIs: \$75,000.

Farm Waste to Energy: A Sustainable Solution for Small Dairy Farms. U.S. Environmental Protection Agency's P3 Program (People, Prosperity and Planet)- Phase 1. 5-2009 to 6-2010. S. Grimberg, S. Rogers and R. Welsh co-PIs: \$10,000.

Social Benefits of the Wetlands Reserve Program in Northern New York. Merwin Rural Services Institute of SUNY Potsdam. 1-09 to 1-10. R. Welsh and D. Horn co-PIs: \$5,000.

Integrated Methane Digester with Value-Added Processing. Jefferson County Job Development Corporation. 6-6-2008 to 5-31-2010. S. Powers, P. Pillay, S. Grimberg and R. Welsh co-PIs: \$154, 180.

Public and Private Aspects of the Research of Scientists at the U.S. Department of Agriculture. Economic Research Service/U.S. Department of Agriculture. January 15, 2007-May 15, 2007. R. Welsh, PI: \$40,000.

Energy Economics of Farm Biogas in Cold Climates. U.S. Department of Energy, June 1, 2006 – May 2008. P. Pillay, S. Powers, S. Grimberg, E. Thacher and R. Welsh, co-PIs: \$247, 500.

Dairy Farm Power and Energy from Agricultural Wastes: Increasing Profitability and Reducing Environmental Impact. NYS Agriculture and Markets, January 2006 – December 2007. S.J. Grimberg, PI, S. Powers, P. Pillay, E. Thacher, R. Welsh, R. Robbins co-PIs: \$1,000,000.

Environmental and Economic Performance of an Integrated, Value-Added Digester-Cogeneration Process, USDA-DOE. January 2006 – December 2008. S. Powers, PI, S.J. Grimberg, P. Pillay, E. Thacher, R. Welsh, co-PIs: \$806,000.

Subcontract from Iowa State University to R. Welsh for work on *Forming Agricultural Bargaining Units for a Sustainable and Equitable Agriculture.* 12-15-03 through 12-15-04. \$32,630.

Public Goods and University-Industry Relationships in Agricultural Biotechnology. Initiative for the Future of Food and Agricultural Systems of U.S. Department of Agriculture. 9/2001 – 9/2004 (extended until 2005). D. Ervin, S. Buccola, B. Lacy and R. Welsh co-PIs: \$2 million.

Subcontract from Winrock International to Rick Welsh for work on *Effects of Agricultural Bargaining,* 1/2002 – 12/2007: \$7,480.

Subcontract from Winrock International to Rick Welsh for work on *Biotechnology Initiative: Business Planning and Convening,* 8/00 – 12/00: \$7,000.

Publications (* Denotes senior authorship is shared)

Edited Book

Lyson, T.A., S. Stevenson and R. Welsh (Eds.). 2008. *Food and the Mid-Level Farm: Renewing an Agriculture of the Middle.* MIT Press.

Peer-Reviewed Articles

Tynan, M.K., M.C. Bryant, R. Welsh, and S. Greenwood. 2023. "Preliminary findings of northeast organic and conventional dairy farmers' perception of benefits and challenges in feeding algae " *Renewable Agriculture and Food Systems* DOI: <https://doi.org/10.1017/S1742170523000157>.

Rick Welsh, Elizabeth A. Pickard, Sadie J. Ryan, Joseph H. Bisesi Jr, Joseph Makaure, Donald J. Stewart & David A. Larsen. 2022. Mosquito Net Fishing as a Normal Accident and the Roles of Traditional and Bureaucratic Authority, *Society & Natural Resources*, DOI: [10.1080/08941920.2022.2139443](https://doi.org/10.1080/08941920.2022.2139443)

Geladi, I., Henry, P., Couenberg, P., Welsh, R., & Fessl, B.2022. What are farmers' perceptions about farmland landbirds? A Galapagos Islands perspective. *Renewable Agriculture and Food Systems*, 37(5), 504-515. doi:10.1017/S1742170522000229.

Minkoff-Zern, L, M.J. Dudley, A. Zoodsma, B. Walia, and R. Welsh. 2022." Protracted dependence and unstable relations: Agrarian questions in the H-2A visa program" *Journal of Rural Studies*, 93: 43-54. <https://doi.org/10.1016/j.jrurstud.2022.05.006>.

Welsh, R., Y. Chien, A. Traub and L. Glenna. 2021. "Plant Science and Intellectual Property Protections in Taiwan." *Rural Sociology*. 86: 864-885.

Traub, A., R. Welsh, S. Rogers, and S. Grimberg. 2021. Small Farms Using Anaerobic Digestion: A Viable Technology Education and Outreach Effort, *Agroecology and Sustainable Food Systems*, DOI: 10.1080/21683565.2020.1841708

Larsen, D.A. J. Makaure, S. J. Ryan, D. Stewart, A. Traub, R. Welsh, D. H. Love, and J. H. Bisesi Jr. 2021. "Implications of Insecticide-Treated Mosquito Net Fishing in Lower Income Countries." *Environmental Health Perspectives*, 129(1). [Commentary]

Lacy W.B., L. Glenna, D. Biscotti, R. Welsh, and L. Lacy. 2020. "Agricultural Biotechnology, Academic Capitalism and the Two Cultures of Science." *Journal of Molecular Biology and Biotechnology*, 5: 04.

Minkoff-Zern, L-A., Welsh, R., & Ludden, M. 2019. Immigrant farmers, sustainable practices: growing ecological and racial diversity in alternative agrifood spaces. *Agroecology and Sustainable Food Systems*. DOI: 10.1080/21683565.2019.1666076

Dimitri, C. Oberholtzer, L., Pressman, A., & Welsh, R. 2019. "Supporting local and regional food systems through intermediated markets: Introduction to themed issues." *Renewable Agriculture and Food Systems*, 34(3), 179-180.

Larsen DA, R, Welsh, A. Mulenga and R. Reid. 2018. "Widespread mosquito net fishing in the Barotse floodplain: Evidence from qualitative interviews." *PLoS ONE* 13: e0195808. doi: 10.1371/journal.pone.0195808.

Welsh, R., Webb, M., Grimberg, S., & Rogers, S. 2018. Measuring the results of a workshop on installing anaerobic digesters on smaller livestock farms. *Renewable Agriculture and Food Systems*, 1-5. doi:10.1017/S1742170518000212

Ludden, M., R. Welsh, E. Weissman, D. Hilchey, G.W. Gillespie and A. Guptill. 2018. "The Progressive Agriculture Index: Assessing the advancement of agrifood systems." *Journal of Agriculture, Food Systems, and Community Development*. Advance online publication.

Guptill, A., D.A. Larsen, R. Welsh and E. Kelly. 2018. "Do affluent urban consumers drive direct food sales in the Northeast United States? A three-part analysis." *Journal of Agriculture, Food Systems, and Community Development*. Advance online publication. doi: 10.5304/jafscd.2018.082.005

- Welsh, R., M. Webb, and T. Langen. 2018. "Factors affecting landowner enrollment in wetland restoration in northeastern New York State." *Land Use Policy*. doi: 10.1016/j.landusepol.2018.02.051
- Rogers, S., C. Shaffer, T. Langen and R. Welsh. 2018. "Antibiotic-Resistant Genes and Pathogens Shed by Wild Deer Correlate with Land Application of Residuals" *Ecohealth*. doi: 10.1007/s10393-018-1316-7.
- Welsh, R. 2016. "The Labeling of Food with Genetically Engineered Content: Understanding the context." *Renewable Agriculture and Food Systems*. doi:10.1017/S1742170515000551.
- Casper, S. and R. Welsh. 2016. "British Romantic Generalism in the Age of Specialism, 1870–1990." *Social History of Medicine*. doi:10.1093/shm/hkv103
- Glenna, L.L., J. Tooker, R. Welsh and D. Ervin. 2015. "Intellectual Property, Scientific Independence, and the Efficacy and Environmental Impacts of Genetically Engineered Crops." *Rural Sociology* 80: 147-172.
- Lacy, W.B., L.L. Glenna, D. Biscotti, R. Welsh and K. Clancy. 2013. "The Two Cultures of Science: Implications for University-Industry Relationships in U.S. Agriculture Biotechnology." *Journal of Integrative Agriculture* 13: 455-466.
- Biscotti, D., L.L. Glenna, W.B. Lacy and R. Welsh. 2012. "Constructing "Disinterested" Academic Science: Relational Work in University–Industry Research Collaborations" *Politics and Society* 40: 273-308.
- Glenna, L.L.*, R. Welsh*, D. Ervin, W. Lacy, and D. Biscotti. 2011. "Commercial science, scientists' values, and university biotechnology research agendas." *Research Policy*, 40:957-968.
- Welsh, R. and R. Y. Rivers. 2010. "Environmental management strategies in agriculture." *Agriculture and Human Values*, 28: 297-302.
- Welsh, R., S. Grimberg, G. Gillespie and M. Swindal. 2010. "Technoscience, anaerobic digesters and the dairy industry: Factors influencing northern New York dairy farmers' views on an alternative energy technology." *Renewable Agriculture and Food Systems* 25: 170-181. [invited]
- M. Swindal, G. Gillespie and R. Welsh. 2010. "Community digester operations and dairy farmer perspectives." *Agriculture and Human Values* 27:461-474.
- Welsh, R. 2009. "Farm and market structure, industrial regulation and rural community welfare: Conceptual and methodological issues." *Agriculture and Human Values*, 26:21-28. [invited]
- Welsh, R., L. Glenna, W.B. Lacy and D. Biscotti. 2008. "Close enough but not too far: Assessing the effects of university-industry research relationships and the rise of academic capitalism" *Research Policy* 37: 1854-64.
- Glenna, L., R. Welsh, W.B. Lacy and D. Biscotti. 2007. "Industry perceptions of university-industry relationships related to agricultural biotechnology." *Rural Sociology*, 72: 608-631
- Glenna, L., W.B. Lacy, R. Welsh and D. Biscotti. 2007. "University administrators, agricultural biotechnology, and academic capitalism: Defining the public good to promote university-industry relationships." *The Sociological Quarterly*, 48: 141-163
- Welsh, R. and L. Glenna. 2006. "Considering the role of the university in conducting research on agri-biotechnologies." *Social Studies of Science*, 36: 929-942
- Welsh, R. and D. Ervin. 2006. "Precaution as an approach to technology development: The case of transgenic crops." *Science, Technology and Human Values*, 31: 153-172.

- Langen, T.A. and R. Welsh. 2006. "Does a problem-based learning approach to teaching conservation science and policy improve content knowledge and change attitudes?" *Conservation Biology*, 20: 600-608
- Lyson, T. and R. Welsh*. 2005. "Agricultural industrialization, anti-corporate farming laws and rural community welfare." *Environment and Planning A.*, 37: 1479-1491
- Ervin, D., R. Welsh, S. Batie and C.L. Carpentier. 2003. "Towards an ecological systems approach in public research for environmental regulation of transgenic crops." *Agriculture, Ecosystems & Environment*, 99:1-14
- Hinrichs, C and R. Welsh*. 2003. "The effects of the industrialization of U.S. livestock agriculture on promoting sustainable agriculture practices." *Agriculture and Human Values*, 20: 125-141
- Welsh, R., B. Hubbell and C. Carpentier. 2003. "Agro-food system restructuring and the geographic concentration of U.S. swine production." *Environment and Planning A.*, 35: 215-229
- Welsh, R, B. Hubbell, D. Ervin, and M. Jahn. 2002 "GM crops and the pesticide paradigm". *Nature Biotechnology* 20: 548-549. {Correspondence}
- Ervin, D., S.S. Batie, C.L. Carpentier and R. Welsh. 2001. "Transgenic crops and the environment: The economics of precaution" *Western Journal of Agricultural Economics* 26: 554-554.
- Lyson, T.A., R. Torres and R. Welsh. 2001. "Scale of agricultural production, civic engagement and community welfare." *Social Forces*, 80: 311-327
- Welsh, R., C.L. Carpentier and B. Hubbell. 2001. "On the effectiveness of state anti-corporate farming laws in the United States." *Food Policy*, 26: 543-548
- Welsh, R. and B. Hubbell. 1999. "Contract hog production and environmental management in the southern United States." *Agronomy Journal*, 91: 883-888
- Hubbell, B. and R. Welsh. 1998. "An examination of trends in geographic concentration in U.S. hog production: 1974 to 1996." *Journal of Agricultural and Applied Economics*, 30: 285-299
- Hubbell, B. and R. Welsh. 1998. "Transgenic crops: Engineering a more sustainable agriculture?" *Agriculture and Human Values*, 15: 43-56
- Welsh, R. 1998. "The importance of ownership arrangements in U.S. agriculture." *Rural Sociology*, 63: 199-213.
- Welsh, R. 1997. "Vertical coordination, producer response, and the locus of control over agricultural production decisions." *Rural Sociology*, 62: 491-508
- Graham, M.E, R. Welsh and G. Mueller. 1997. "In the land of milk and money: One dairy farm's strategic compensation system." *Journal of Agribusiness*, 15: 171-188
- Welsh, R. and T.A. Lyson. 1997. "Farm structure, market structure and agricultural sustainability goals: The case of New York State dairying." *American Journal of Alternative Agriculture*, 12: 14-18
- Welsh, R. 1996. "Rotational grazing: A farm profile." *Journal of Sustainable Agriculture*, 8: 35-46
- Welsh, R. 1996. "Farm profile: The Battisti family dairy farm." *Journal of Soil and Water Conservation*, 5: 34-37 [feature article].

Feldman, S. and R. Welsh. 1995. "Feminist knowledge claims, local knowledge, and gender divisions of agricultural labor: Constructing a successor science." *Rural Sociology*, 60: 23-43

Welsh, R. 1994. "Farm Profile: The Cecchini family dairy farm." *Journal of Sustainable Agriculture*, 5: 187-197

Lyson, T.A. and R. Welsh. 1993. "Crop diversity, the production function and the debate between conventional and alternative agriculturists." *Rural Sociology*, 58: 424-439

Beilock, R., J. Burkhardt and R. Welsh. 1989. "Risk permits: An alternative approach to transportation safety regulations." *Logistics and Transportation Review*, 25: 195-208

Book Chapters

Welsh, R., Amy K. Bentley, Lawrence Lam, Stefan Grimberg and Shane Rogers. 2024. "Anaerobic Digester Technology for Small-to-Moderate-Sized Dairy Farms: Constraints and Solutions." In *Reference Module in Earth Systems and Environmental Sciences*. Elsevier Inc.

Guptill, A. and R. Welsh. 2014. "The Declining Middle of American Agriculture: A Spatial Phenomenon." Pp. 36-50 in Connor Baily, Leif Jensen, and Elizabeth Ransom (EDS). *Rural America in a Globalizing World: Problems and Prospects for the 2010s*. Morgantown, WV: West Virginia University Press.

Biscotti, D., L. Glenna, W.B. Lacy and R. Welsh. 2009. "The "independent" investigator: How academic scientists construct their professional identity in university-industry agricultural biotechnology research collaborations." Pages 261-288 in N. Bandelj's (ed.) *Economic Sociology of Work*, Volume 18 of *Research in the Sociology of Work* series. Emerald Group Publishing Limited/JAI.

Welsh, R., T.A. Lyson and G.W. Stevenson. 2008. "Preface: In T.A. Lyson, G.W. Stevenson and R. Welsh (eds.) *Food and the Mid-Level Farm: Renewing an Agriculture of the Middle*. MIT Press.

Guptill, A. and R. Welsh. 2008. "Is relationship marketing an alternative to the corporatization of organics? A case study of the Organic Farmers Association for Relationship Marketing (OFARM)" In T.A. Lyson, G.W. Stevenson and R. Welsh (eds.) *Food and the Mid-Level Farm: Renewing Agriculture of the Middle*. MIT Press.

Grow, S., A. Guptill, E. Higgins, T.A. Lyson and R. Welsh. 2008. "The effect of laws that foster agricultural bargaining: The case of apple growers in Michigan and New York State" In T.A. Lyson, G.W. Stevenson and R. Welsh (eds.) *Food and the Mid-Level Farm: Renewing Agriculture of the Middle*. MIT Press. (Reprinted with permission from Winrock International)

Stevenson, G.W., R. Welsh and T.A. Lyson. 2008. "Epilogue" In T.A. Lyson, G.W. Stevenson and R. Welsh (eds.) *Food and the Mid-Level Farm: Renewing Agriculture of the Middle*. MIT Press.

Ervin, D. and R. Welsh*. 2007. "Environmental effects of genetically modified crops: A differentiated risk assessment model." In R.E. Just, J.M. Alston and D. Zilberman (eds.) *Regulating Agricultural Biotechnology: Economics and Policy*. Springer. (Reprinted with permission from Springer). This volume won the Quality of Communication Award of the American Agricultural Economics Association at its annual meeting in Portland, Oregon, July 29-August 1, 2007.

Ervin, D. and R. Welsh*. 2005. "Environmental effects of genetically modified crops: A differentiated risk assessment model." In J. Wesseler, (ed.) *Environmental Costs and Benefits of Transgenic Crops in Europe: Implications for Research, Production and Consumption*. Springer.

Hubbell, B. and R. Welsh. 2001. "Issues in Benefits Measurements for Transgenic Crops in Sustainable Agriculture." Pp. 151-176 In J.K.J. Gowdy and J. van der Straaten (eds.) *Sustainability in Action*, Edward Elgar Publishers.

Reports

Hughes, M., A. Pressman, L. Oberholtzer, C. Dimitri, and R. Welsh. 2022. *Selling to Local and Regional Markets: Barriers and Opportunities for Beginning Farmers*. NCAT/ATTRA, July. <https://attra.ncat.org/publication/selling-to-local-and-regional-markets-barriers-and-opportunities-for-beginning-farmers/>

Heisey, P.W., J.L. King, K.D. Rubenstein, D.A. Bucks, R. Welsh. 2010. *Assessing the Benefits of Public Research Within an Economic Framework: The Case of USDA's Agricultural Research Service*, ERR-95, U.S. Dept. of Agr., Econ. Res. Serv. May 2010

Grow, S., A. Guptill, T.A. Lyson, R. Welsh. 2003. *The Effects of Laws That Foster Agricultural Bargaining: The case of apple growers in Michigan and New York State*. Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International.

Welsh, R. and T.A. Lyson. 2001. *Anti-corporate Farming Laws, the Goldschmidt Hypothesis and Rural Community Welfare*. Friends of the Constitution, Elmwood, Nebraska.

Ervin, D., S. Batie, R. Welsh, C.L. Carpentier, J.I. Fern, N.J. Richman, and M.A. Schulz. 2000. *Transgenic crops; an Environmental Assessment*. The Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International Institute for Agricultural Development.

Welsh, R. 1999. *The Economics of Organic Grain and Soybean Production in the Midwestern United States*. Policy Studies Report #13, The Henry A. Wallace Institute for Alternative Agriculture, Greenbelt, MD.

Welsh, R. and K. Ingram. 1998. *Systems Research Methods*. Southern Region Sustainable Agriculture Research and Education Program. Georgia Station, Griffin, GA.

Welsh, R. 1997. *Reorganizing U.S. Agriculture: The Rise of Industrial Agriculture and Direct Marketing*. Policy Studies Report #7, The Henry A. Wallace Institute for Alternative Agriculture, Greenbelt, MD.

Welsh, R. 1996. *The Industrial Reorganization of U.S. Agriculture: An Overview and Background Report*. Policy Studies Report #6, The Henry A. Wallace Institute for Alternative Agriculture, Greenbelt, MD.

Hilchey, D., R. Welsh, A. Knight and J. Green. 1996. *Farming Entrepreneurs: Case Studies of Seven Innovative Horticultural Businesses in New York State*. The Farming Alternatives Program, Cornell University.

Welsh, R. 1992. *P.L. 480 Title I and Market Development*. USDA/Foreign Agricultural Service Staff Report #28.

Milon, W.J. and R. Welsh. 1989. *An Economic Analysis of Sport Fishing and the Effects of Hydrilla Management in Lake County, Florida*. Institute of Food and Agriculture Sciences, Gainesville, Florida. Economic Report #118.

Other Publications

Book Reviews

The Takeover: Chicken Farming and the Roots of American Agribusiness, Monica R. Gisolfi, Athens, University of Georgia Press, 2017. Review of Agricultural, Food and Environmental Studies, 98(4), 313-315

Beyond Food Production: The role of agriculture in poverty reduction. Fabrizio Bresciani and Alberto Valdes (eds). Published by Food and Agriculture Organization of the United Nations and Edward Elgar Publishers. 2009. *Agribusiness* 25(4).

The New Political Sociology of Science: Institutions, Networks and Power. Scott Frickel and Kelly Moore (eds). The University of Wisconsin Press. 2006. *Contemporary Sociology* 2008 37(5).

Farming for Us All: Practical Agriculture and the Cultivation of Sustainability. Michael Mayerfeld Bell. University Park, PA: Pennsylvania Press, 2004. *Contemporary Sociology* 2005 35(2).

Privatization of Information and Agricultural Industrialization. Steven A. Wolf (ed). 1997. CRC Press. *Rural Sociology* 2002, 67(1).

The Doubly Green Revolution: Food For All in the 21st Century. Gordon Conway. *Society and Natural Resources*, 2000 13:611-15.

Pigs, Profits and Rural Communities. Kendall Thu and E. Paul Durrenberger (eds). SUNY Press 1998. *American Journal of Alternative Agriculture*, 1998 13:190-191.

Commentaries and Editorials

“The Difference Between the Vaccine and the GMO Food Debates” *Renewable Agriculture and Food Systems*. (2017) By, Laura-Anne Minkoff-Zern and Rick Welsh

“Sustainable agriculture systems in a resource limited future” *Renewable Agriculture and Food Systems* (2010) 25: 83-84.

“Commentary on ‘Ever Since Hightower: The politics of agricultural research activism in the molecular age’” *Agriculture and Human Values*, (2005) 22: 289-290

Paper and Poster Presentations

Invited Presentations

Welsh R. 2021. “Climate Change and the Food System” Presented to the sales staff of Sovena USA, Rome, New York.

Welsh R. 2020. “Climate Change and the Food System” Presented to the Richard Ivey School of Business at the Western University, Ontario, CA.

Welsh, R. 2018. "Scientists Views on Transdisciplinary Research with Special Emphasis on Climate Change Research." Presented at National Chiao Tung University in Taiwan.

Welsh, R. 2015. “Understanding the Social Controversies of Agricultural Biotechnologies” Panel on the Social and Economic Dimensions of Sustainability organized for the annual meeting of the North American Agricultural Biotechnology Council 27- *Stewardship for the Sustainability of Genetically Engineered Crops* at Pennsylvania State University.

Welsh, R. 2012. “Climate Change and Food Security” Presented at the Forum on Climate Change at St. Lawrence University in Canton, NY on September 9, 2012.

Welsh, R. 2011. “Social Aspects of Sustainable Agriculture” Presented to Administrative Council of Northeast SARE (U.S.D.A.’s Sustainable Agriculture Research and Education Program for the Northeast Region).

Welsh, R. 2010. "Elements of Successful Transdisciplinary Research" National Institute of Food and Agriculture's workshop on "Social Science Research Planning: Climate Change, Bio-Energy, and Natural Resources."

Welsh, R. and L. Glenna. 2008. "Choice of Research Priorities by Public and Private Sector Scientists and Research Administrators." Assessing the Benefits of Agricultural Research Service R&D within an Economic Framework: A Preliminary Results Workshop. Economic Research Service/U.S. Department of Agriculture.

Welsh, R., G. Gillespie and M. Gremelspacher. 2007. "Cow Power: Use of Anaerobic Digesters to Address Odor and Energy Issues in the New York Dairy Industry." Environmental Studies Seminar at Colgate University, September 21.

Welsh, R., D. Ervin, L. Glenna, S. Buccola, H. Yang, W. Lacy and D. Biscotti. 2006. "Agricultural Biotechnology & University-Industry Research Relationships: Views of University Scientists and Administrators and Industry." National Agricultural Biotechnology Council, June 12-14, 2006 in Ithaca, New York.

Welsh, R. 2004. Panel on "Universities and the Production of Knowledge for Industry." The 177th Annual Meeting of the Committee on Science, Engineering and Public Policy of the National Academics of Science, in Washington, D.C.

Ervin, D. and R. Welsh. 2003. "Environmental Effects of Genetically Modified Crops: A Differentiated Risk Assessment Model." Presented at a Frontis Sponsored Workshop on Environmental Costs and Benefits of Transgenic Crops in Europe. Wageningen University, Wageningen, the Netherlands, June 1-4, 2003.

Welsh, R. 2002. "Social Implications of Agricultural Biotechnology." Southern Region Sustainable Agriculture Research & Education/Professional Development Program Annual Workshop in Chattanooga, TN January 24-25.

Ervin, D., S. Batie, C.L. Carpentier and R. Welsh. 2001. "Transgenic Crops: Economic and Institutional Forces Shaping Environmental Benefits and Risks." Annual Meeting of the Western Agricultural Economics Association in Salt Lake City, Utah.

Welsh, R. 2000. "Genetically Modified Organisms on the Farm." Presentation at the Chesapeake Alliance for Sustainable Agriculture, First Annual Meeting in Gaithersburg, MD.

Welsh, R. 2000. "Transgenic Crops: Potential Environmental Implications." Presentation at the National Grocer's Association Annual Meeting in Las Vegas, NV.

Welsh, R. 1999. "Sustainable Agriculture and Genetically Modified Pest Protected (GMPP) Plants." Washington, D.C.: Presentation to the National Research Council's Board on Agriculture Committee on GMPP Plants.

Welsh, R. 1999. "The Importance of Sustainable Agriculture in the Chesapeake Bay Region." Beltsville, MD: Third Annual U.S. Department of Agriculture/Agricultural Research Service Symposium on Sustainable Agriculture.

Welsh, R. 1997. "Structural Change in Agriculture and its Impact on Small Farms." Memphis, TN: Presentation to the Secretary of Agriculture's National Commission on Small Farms.

Welsh, R. 1997. "The Importance of Ownership Arrangements in U.S. Agriculture." Oklahoma City, OK: Kerr Center for Sustainable Agriculture Rural Development Symposium.

Other Presentations

M.K. Tynan, Welsh, R. R. Fitzgerald, S. Greenwood, D. Conner, N. Price, C. Quigley and A. Moen. 2023. Dairy Nutritionists' Perspectives on the Efficacy of Feeding Algae Feed Supplements to Dairy Cattle. Presented at the Annual Meeting of the Rural Sociological Society in Burlington, VT.

Welsh, R. M.K. Tynan, R. Fitzgerald, S. Greenwood, D. Conner, N. Price, C. Quigley and A. Moen. 2023. Dairy Nutritionists' Perspectives on the Efficacy of Feeding Algae Feed Supplements to Dairy Cattle. Presented at the gphers in Denver, CO.

Welsh, R. and Y. Chen. 2019. "Plant Science Research and Intellectual Property Protections in Taiwan." Annual Meeting of the Agriculture, Food and Human Values Society at University of Alaska-Anchorage.

Ludden, M., R. Welsh, E. Weissman, D. Hilchey, G. Gillespie and A. Guptill. 2018. "The Progressive Agriculture Index." Annual Meeting of the Agriculture, Food and Human Values Society in Madison, WI.

Welsh, R and D. Larsen. 2017. "Are Insecticide Nets Being Misused as Fishing Nets and Causing Fishery Decline in Western Province, Zambia?" Annual Meeting of the Agriculture, Food and Human Values Society at Occidental College in Los Angeles, CA

Guptill, A., D. Larsen, R. Welsh and E. Kelly. 2015. "Direct Marketing in the Northeastern U.S.: Boutique, Grassroots or Both? Annual Meeting of the Agriculture, Food and Human Values Society in Pittsburgh, PA June.

Welsh, R., M. Webb and S. Heinl. 2015. "Factors Influencing Valuation of Wetland Preservation: A Preliminary Analysis" Presented at the 22nd Annual River Symposium at the St. Lawrence Power Development Visitor Center in Cornwall, Ontario, May 5.

Guptill, A., D. Larsen, E. Kelly and R. Welsh. 2014. "Factors associated with direct marketing in the Northeastern United States." Annual Meeting of the Rural Sociological Society in New Orleans, LA.

Welsh, R., J. Heinl and M. Webb. 2014. "Factors influencing participation in federal wetland conservation programs: a preliminary analysis." Annual Meeting of the Rural Sociological Society in New Orleans, LA.

Welsh, R., S. Thornsby, M. Woods and S. Reynolds. 2013. "Scientists' Views on Transdisciplinary Research." Annual Meeting of the Rural Sociological Society in New York City, NY.

Glenna, Leland, J. Tooker, R. Welsh and D. Ervin. 2013. "Intellectual Property and Agricultural Innovation: The Case of Genetically Engineered Crops." Annual Meeting of the Rural Sociological Society in New York City, NY.

Guptill, Amy and R. Welsh. 2013. "The Declining Middle of American Agriculture: A Spatial Phenomenon. Annual Meeting of the Rural Sociological Society in New York City, NY.

Welsh, R., Amy Guptill and Erin Kelly. 2013. "Modeling Direct Marketing in the Northeast." Annual Meeting of the Agriculture and Human Values Society in Lansing, MI.

Welsh, R., J. Rogers and D. Bradburd. 2012. "Assessing Changes in Attitudes and Behavior from a Food & Society Course" Annual Meeting of the Rural Sociological Society in Cincinnati, Ohio.

Welsh, R., T. Langen, C. Benson, D. Horn and S. Kemmerer. 2010. "Social and ecological benefits of the Wetland Reserve Program" Annual Meeting of the Rural Sociological Society in Atlanta, Georgia.

Welsh, R., G. Gillespie and M. Swindal. 2009. "Technoscience, anaerobic digesters and the dairy industry: Factors influencing northern New York dairy farmers' views on an alternative energy technology." Annual Meeting of the Rural Sociological Society in Madison, WI.

Welsh, R. and H. Sullivan-Catlin. 2009. "Community Supported Agriculture (CSA) in the North Country: Motivations and Oppositions among Members and Farmers." Presented at the Annual Meeting of the Agriculture and Human Values Society in State College, PA.

- Welsh, R., L. Glenna, W. Lacy and D. Biscotti. 2008. "Choice of Research Priorities by Public and Private Sector Scientists" Social Studies of Science Annual Meeting in Rotterdam, Netherlands.
- Welsh, R., G. Gillespie and M. Gremelspacher. 2008. "Technoscience, Anaerobic Digester Technology and the Dairy Industry" Annual Meeting of the American Sociological Association in Boston, MA.
- Biscotti, D., W. Lacy, L. Glenna and R. Welsh. 2008. "The "Independent Investigator": Resource Dependence Dilemmas in University-Industry Agricultural Biotechnology Research Collaborations" Annual Meeting of the American Sociological Association in Boston, MA.
- Welsh, Rick, Leland Glenna, William Lacy and Dina Biscotti. 2008. "Choice of Research Priorities by Public and Private Sector" Paper presented at the European Association for the Study of Science and Technology meetings, Rotterdam, The Netherlands.
- Welsh, Rick, Leland Glenna, William B. Lacy, and Dina Biscotti. 2008. "Measuring Agricultural Science Orientations" Paper presented at the Rural Sociological Society meetings, Manchester, New Hampshire.
- Lacy, William B., Leland Glenna, Rick Welsh, and Dina Biscotti. 2008. "University and Industry Cultures of Science in Agricultural Biotechnology: Conflictual, Complementary or Convergent" Paper presented at the Rural Sociological Society meetings, Manchester, New Hampshire. 31 July 2008.
- Gremelspacher, Megan, Gilbert Gillespie and Rick Welsh. 2008. "Community Digester Operations: New York Dairy Farmer Perspectives" Paper presented at the annual meeting of the Rural Sociological Society, Manchester, NH, July 28-31. Also presented at Department of Development Sociology 2008 Annual Encore Conference, September 26.
- Welsh, R., L. Glenna, W. Lacy and D. Biscotti. 2007. "From an Economics of Science to an Economic Sociology of Science." Social Studies of Science Annual Meeting in Montreal, Quebec, Canada.
- Gremelspacher, Megan, Rick Welsh and Gilbert Gillespie. 2007. "Dairy Farmer Views on Alternative Energy Production" Paper presented at the annual meeting of the Rural Sociological Society, Santa Clara, CA, August 2-5.
- Welsh, R., G. Gillespie and M. Gremelspacher. 2007. "New York State Dairy Farmer Attitudes About, and Experiences with, Anaerobic Digesters" Annual Meeting of the Agriculture Food, and Human Values Society in Vancouver, British Columbia.
- Welsh, R., L. Glenna, W. Lacy and D. Biscotti. 2006. "Science, Agri-biotechnology and Economy." American Sociological Association Annual Meeting in Montreal, Canada.
- Glenna, L. R. Welsh, W. Lacy and D. Biscotti. 2006. "University and Industry Perceptions of University-Industry Relationships Related to Agricultural Biotechnology Research." Paper presented at the 10th International Consortium on Agricultural Biotechnology Research, Ravello, Italy.
- Glenna, L. R. Welsh, W. Lacy and D. Biscotti. 2006. "University and Industry Perceptions of University-Industry Relationships Related to Agricultural Biotechnology Research." Paper presented at the NC-1003 Symposium "Funding Agricultural Research: Evolving Institutional Frameworks. Jekyll Island, Georgia.
- Welsh, R., L. Glenna, W.B. Lacy and D. Biscotti. 2005. "Academic Capitalism in Agricultural Biotechnology: results of case studies of six U.S. land grant universities." Conference on Economic Sociology and Technology, Ithaca, NY.
- Biscotti, D., W.B. Lacy, L. Glenna and R. Welsh. 2005. "Agricultural Biotechnology and the Land Grant University Research Mission." Joint Annual meetings of the Agriculture Food and Human Values Society and the Association for the Study of Food and Society, Portland, OR.

- Biscotti, D., W.B. Lacy, L. Glenna and R. Welsh. 2005. "Institutional Boundaries and Interorganizational Collaboration in the Field of Agricultural Biotechnology." American Sociological Association annual meeting, Philadelphia, PA.
- Biscotti, D., W.B. Lacy, L. Glenna and R. Welsh. 2005. "Systems of Exchange in U.S. University-Industry Agricultural Biotechnology Research Collaborations." Poster presented at the ninth international conference of the Consortium on Agricultural Biotechnology Research in Ravello, Italy.
- Glenna, L., R. Welsh, W.B. Lacy and D. Biscotti. 2005. "University Agricultural Biotechnology Research in the Context of Academic Capitalism." American Sociological Association annual meeting, Philadelphia, PA.
- Lacy, W.B., L. Glenna, R. Welsh and D. Biscotti. 2005. "The Two Cultures of Science: university/industry research environments in agricultural biotechnology." Rural Sociological Society Annual meeting, Tampa, FL.
- Lacy, W.B., L. Glenna, R. Welsh and D. Biscotti. 2005. "The Two Cultures of Science: university/industry research environments in agricultural biotechnology." Fourth global conference of the Global Consortium of Higher Education and Research for Agriculture, Hangzhou, China.
- Welsh, R. and L. Glenna. 2004. "Considering the Role of the University in Conducting Research on Agricultural Biotechnologies" Presented as part of the Regular Session on Science and Technology of the Annual Meeting of the American Sociological Association in San Francisco August 16.
- Biscotti, D., L. Glenna, W.B. Lacy and R. Welsh. 2004. "Institutional and Ideological Regulation of University-Industry Agricultural Biotechnology Research Collaborations." Rural Sociological Society annual meeting, Sacramento, CA.
- Glenna, L., W.B. Lacy, R. Welsh and D. Biscotti. 2004. "The University and Agricultural Biotechnology in Institutional Context." Leland Glenna, William B. Lacy, Rick Welsh and Dina Biscotti. Rural Sociological Society annual meeting, Sacramento, CA.
- Welsh, R., L. Glenna, W. Lacy and D. Biscotti. 2003. "Factors Influencing University Scientists' Opinions of University-Industry Relationships in Agricultural Biotechnology." Presented as part of the Sociology of Science Section of the Annual Meeting of the American Sociological Association in Atlanta, August 16-19.
- Glenna, L., W.B. Lacy, R. Welsh and D. Biscotti. 2003. "The Land Grant University and Marketable Science." Joint annual meetings of the Agriculture Food and Human Values Society and the Association for the Study of Food and Society, Austin, TX.
- Lacy, W.B., L. Glenna, R. Welsh and D. Biscotti. 2003. "The Two Cultures of Science: university/industry research environments, criteria for problem choice and perceived impact." Rural Sociological Society annual meeting. Montreal, Canada.
- Welsh, R., B. Hubbell, D. Erwin and M. Jahn. 2002. "Monarch butterflies, The Science Wars and Precautionary Technology Development." Presented as part of the Environment and Technology Section of the Annual Meeting of the American Sociological Association in Chicago, Illinois, August 16-19.
- Welsh, R., B. Hubbell and C. Carpentier. 2002. "Agro-food System Restructuring and the Geographic Concentration of the U.S. Swine Industry." Presented at the Annual Meeting of the Rural Sociological Society in Chicago, Illinois, August 15-18.
- Welsh, R., T. Lyson, S. Grow and A. Guptill. 2002. "Grower Collective Bargaining in U.S. Agriculture: Lessons from the MI & NY Apple Industries." Presented at the Annual Meeting of the Agriculture, Food and Human Values Society in Chicago Illinois, June 13-16.

Lacy, W.B., L. Glenna, D. Biscotti and R. Welsh. 2002. "University-Industry Relationships and the Public Good: preliminary interview findings." Pew Foundation Conference on Food and Biotechnology. Research Triangle Park, N.C.

Ervin, D., R. Welsh, S. Batie and C. Carpentier. 2001. "Public Research for Biosafety Regulation of Transgenic Crops." June 15-18, 2001. 5th International Conference convened by International Consortium on Agricultural Biotechnology Research Conference in Ravello, Italy.

Welsh, R. and T.A. Lyson. 2001. "Anti-corporate Farming Laws and Rural Community Welfare." Annual Meeting of the Rural Sociological Society in Albuquerque, New Mexico. August 15-19.

Welsh, R. and C. Hinrichs. 2001. "Industrialization of the U.S. Livestock Industry and its Implications for Promoting Sustainable Agriculture Practices." Agriculture and Human Values, St. Paul, MN, June 7-10.

Welsh, R. 1999. "Genetically Modified Pest Protected Plants and Sustainable Agriculture." Presented at the 1999 Fall Meeting of the American Bar Association in San Diego, CA, October 7.

Welsh, R. and B. Hubbell. 1999. "Structural Change in the Pork Industry: Some Environmental Implications." Anaheim, CA: American Association for the Advancement of Science.

Welsh, R. 1997. "Feminist Critiques of Agricultural Science." Toronto: Rural Sociological Society Annual Meeting.

Hubbell, B. and R. Welsh. 1997. "Vertical Coordination and On-Farm Environmental Performance: Results of a Mail Survey." Toronto: Rural Sociological Society Annual Meeting.

Welsh, R. and B. Hubbell. 1997. "Hog Contracting and Manure Management in the South and Southeast." Toronto: American Agricultural Economics Association Annual Meeting.

Hubbell, B. and R. Welsh. 1997. "An Entropy-Based Measure of Geographic Concentration of U.S. Hog Production." Toronto: American Agricultural Economics Association Annual Meeting.

Hubbell, B. and R. Welsh. 1996. "Issues in Benefits Measurement for Transgenic Crops in Sustainable Agriculture." Island of Vilm, Germany: Managing Sustainability from the Ground-Up- University of Rostock and Wuppertal Institute for Climate, Environment and Energy.

Lyson, T.A., L. Tauer and R. Welsh. 1995. "Factors Related to Adoption of rBST Among a Population of Farmers in New York State." Atlanta, Georgia: American Association for the Advancement of Science.

Welsh, R. and T.A. Lyson. 1994. "Local Knowledge and the Spirit of Sustainable Agriculture: Socioeconomic Aspects of Pest and Nutrient Management on New York State Dairy Farms." Portland, Oregon: Rural Sociological Society Annual Meeting.

Welsh, R. 1993. "Four Sustainable Agriculture Case Studies." Potsdam, New York: New York State Sociological Society Annual Meeting.